

## SHORTER NOTES

**Blechnum penna-marina in Peru.**—Nineteen species of *Blechnum* were recognized for Peru by Tryon and Stolze (Fieldiana Bot., n.s. 32:56-68. 1993). One of the species, *B. penna-marina* (Poir.) Kuhn was included based on a personal communication reporting a specimen from Cusco (León *et al.* 2757, CUZ, USM.) Reexamination of this specimen, however, revealed that it had been misidentified.

In the central Andes, only *B. andinum* (Baker) C. Chr. and *B. penna-marina* have dimorphic leaves and stoloniferous rhizomes. These two species can be separated by the following key:

1. Lamina with 1-4 reduced proximal pinnae, these distant from distal pinnae; veins simple, rarely furcate on the proximal acroscopic side; indusia erose; laminae herbaceous, less than 10 cm long . . . . . *B. andinum*
1. Lamina gradually reduced, all pinnae or segments contiguous; veins furcate; indusia entire, slightly crenate; laminae usually coriaceous, more than 10 cm long . . . *B. penna-marina*

The Peruvian specimen cited by Tryon and Stolze was collected at 3390 m in a very humid montane forest on the eastern slopes of the Peruvian Andes (approx. 13°14'S, 71°32'W), growing on a rock among mosses and forming colonies. The specimen has a short, erect rhizome, with stoloniferous axes, fasciculate, dimorphic leaves less than 10 cm long, indusia dentate, and well-spaced, reduced proximal pinnae. Based on these characters this specimen is *B. andinum*, a species otherwise known in Peru from two collections made by Bües in Cusco during the 1930's.

Because this was the only specimen cited for *B. penna-marina* by Tryon and Stolze (1993), the question remains whether this species occurs in Peru. Under *B. penna-marina*, Tryon and Stolze commented on the name *B. alpinum* var. *elongatum* Mett. They did not see the type and suggested that it might be another species. Recently, however, Chambers and Farrant (Fern Gaz. 15:92. 1996) considered this name a synonym of *B. penna-marina* ssp. *penna-marina*, although they did not examine the type and did not list Peru within the range of its distribution.

Mettenius (Fil. Lechl. 2:15. 1859) named *B. alpinum* var. *elongatum* based on a Lechler collection from Agapata (Ayapata), located in the Province of Carabaya, Department of Puno, Peru, approx. at 13°52'S, 70°19'W, 3600 m. From his diagnosis and discussion it is clear that Lechler's specimen is dimorphic, with numerous and contiguous pinnae, leaves 30-40 cm long, the fertile one longer than the sterile, and the rhizome stoloniferous with ovate scales. These features describe *B. penna-marina*. Two *Blechnum* specimens collected by Lechler in "Agapata" in June 1854 are accessioned at B; both are *B. penna-marina* ssp. *boliviana* (Rosenst.) T.C. Chambers & P.A. Farrant.

In Peru, other dimorphic species of *Blechnum* with contiguous reduced proximal pinnae are *B. binervatum* (Poir.) C.V. Morton & Lellinger ssp. *fragile*

(Liebm.) R.M. Tryon & Stolze and *B. lehmannii* Hieron. Neither of these has a stoloniferous rhizome. Both species also grow only in forested areas below 3500 m.

In conclusion, both *B. andinum* and *B. penna-marina* ssp. *boliviana* have been collected in Peru. Records for the latter are based on a single collection made during the nineteenth century, and for the former from three collections made during the last 60 years.

Thanks to Harald Komposch for the translation of German comments of Mettenius. I also thank David B. Lellinger, Robbin C. Moran, Alan R. Smith, and Kenneth R. Young for reviews and comments of the manuscript. Thanks also to Alan R. Smith, Tyana Wachter, and Brigitte Zimmer for providing me with photocopies of the studied taxa.—BLANCA LEÓN, Museo de Historia Natural, Av. Arenales 1256, Apartado 14-0434, Lima-14, Peru, and Botany Department, Field Museum, Chicago, IL 60605-2496.

***Salvinia adnata* Desv. Versus *S. molesta* D.S. Mitch.**—The name *Salvinia molesta* D.S. Mitch. (Brit. Fern Gaz. 10:251–252. 1972) has been widely used for an aquatic fern native to the New World tropics but introduced and weedy in the Old World tropics. Recently, de la Sota (Darwiniana 33:309–313. 1995) proposed replacing this name with an earlier one, *S. adnata* Desv. (*Prodromus*, 177. 1827). The subject of this note is our differing interpretation from that of de la Sota concerning the provenance of the type of *S. adnata* and whether it can be proven conspecific with *S. molesta*.

The name *S. adnata* is based on a specimen that, according to its label, was collected on Réunion (“*Habitat in insula Borboniae*”). This locality was accepted by de la Sota (1995); however, it conflicts with what is known about the plant’s weediness, geographic distribution, and insect enemies.

Evidence from several sources indicates that *S. molesta* is native to southern Brazil (Forno, Aquat. Bot. 17:71–83. 1983; Mitchell, Brit. Fern Gaz. 10:251–252. 1972). It is never weedy in South America and has several insect herbivores that feed exclusively upon it. In contrast, in the Old World it is an aggressive weed, in some cases carpeting thousands of hectares of water, and has no native insect enemies that attack it (Thomas and Room, Nature 320: 581–584. 1986). The species was first recorded from the Old World (India) in 1939. Presumably, had it been native, it would have been collected there before that date. Moreover, if it had been native to the Old World, why would it have become a weed only in the 1950s and not before? All of these observations argue that the plant is native to the New World, not the Old World. Why, then, is the type of *S. adnata*, which de la Sota claims is conspecific with *S. molesta*, reportedly from Réunion?

The most likely explanation is a label error. Christensen first pointed this out in his work on the pteridophytes of Madagascar (*Dansk. Bot. Ark.* 7:203. 1932) and annotated the type of *S. adnata* accordingly with “*patria certe erronea*.” In the original description, Desvaux wrote “*Hab. in aquosis insularum*